

CLAIMS

We claim:

- 1 1. A bipolar transistor, comprising:
2 a base;
3 a base contact formed within the base; and
4 an emitter contact formed within the base, wherein the
5 emitter contact surrounds the base contact.
- 1 2. The bipolar transistor of claim 1, further comprising a
2 collector contact formed within a subcollector.
- 1 3. The bipolar transistor of claim 1, wherein the emitter contact
2 forms a ring around the base contact.
- 1 4. The bipolar transistor of claim 1, wherein the base contact is
2 a point contact.
- 1 5. The bipolar transistor of claim 1, wherein wires of the base
2 contact and wires of the emitter contact are vertically stacked
3 atop the contacts.
- 1 6. The bipolar transistor of claim 5, wherein the wires of the
2 base contact are stacked at a level higher than the wires of the

3 emitter contact.

1 7. The bipolar transistor of claim 2, wherein wires of the
2 collector contact are stacked higher than wires of the emitter
3 contact.

1 8. A device, comprising:

2 a base;

3 a base contact formed within the base; and

4 an emitter contact formed within the base, wherein the
5 emitter contact extends around at least two sides of the base
6 contact.

1 9. The device of claim 8, wherein the emitter contact surrounds
2 the base contact.

1 10. The device of claim 8, wherein the emitter contact forms a
2 ring around the base contact.

1 11. The device of claim 8, wherein the base contact is a point
2 contact.

1 12. The device of claim 8, further comprising a collector contact
2 formed within a subcollector.

1 13. The device of claim 8, wherein wires of the base contact and
2 wires of the emitter contact are vertically stacked atop the
3 contacts.

1 14. The device of claim 13, wherein the wires of the base contact
2 are stacked at a level higher than the wires of the emitter
3 contact.

1 15. The device of claim 12, wherein wires of the collector
2 contact are stacked higher than wires of the emitter contact.

1 16. A bipolar transistor, comprising:

2 a base;

3 an emitter contact formed within the base;

4 a base contact formed within the base; and

5 a first wiring stack formed atop the emitter contact and a
6 second wiring stack formed atop the base contact, wherein the
7 second wiring stack includes at least one more wiring level than
8 the first wiring stack.

1 17. The bipolar transistor of claim 16, further comprising a
2 collector contact formed within a subcollector.

1 18. The bipolar transistor of claim 16, wherein the emitter
2 contact surrounds the base contact on at least two sides.

1 19. The bipolar transistor of claim 16, wherein the emitter
2 contact forms a ring around the base contact.

1 20. The bipolar transistor of claim 16, wherein the base contact
2 is a point contact.

1 21. A device, comprising:

2 at least two bipolar transistors, wherein each bipolar
3 transistor further comprises:

4 a base contact;

5 an emitter contact surrounding the base contact; and

6 wherein at least one side of the emitter contact of the at
7 least two bipolar transistors are in electrical contact.

1 22. The device of claim 21, wherein the emitter contact forms a
2 ring around the base contact.

1 23. The device of claim 21, wherein the base contact is a point
2 contact.

1 24. The device of claim 21, wherein wires of the base contact and
2 wires of the emitter contact are vertically stacked atop the
3 contacts.

1 25. The device of claim 24, wherein the wires of the base contact
2 are stacked at a level higher than the wires of the emitter
3 contact.

1 26. The device of claim 21, further including a collector
2 contact.

1 27. The device of claim 26, wherein wires of the collector
2 contact are stacked higher than wires of the emitter contact.

1 28. The device of claim 21, wherein at least one side of each
2 emitter contact of the electrically connected transistors is in
3 physical contact.

1 29. A device, comprising:
2 at least two bipolar transistors, wherein the bipolar
3 transistors are electrically connected to one another, wherein a
4 first bipolar transistor has a first wiring stack and a second
5 bipolar transistor has a second wiring stack, and wherein the
6 second wiring stack comprises at least one more wiring level than
7 the first wiring stack.

1 30. The device of claim 29, wherein the bipolar transistors
2 comprise:

3 a base contact; and
4 an emitter contact surrounding the base contact.

1 31. The device of claim 29, wherein current is supplied to the
2 first bipolar transistor.